

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/536,078	03/24/2000	Franco Travostino	2204/A34	1845	
2101	7590 08/01/2003				
	BROMBERG & SUNSTEIN LLP			EXAMINER	
125 SUMMER STREET BOSTON, MA 02110-1618			OPIE, GEO	E, GEORGE L	
			ART UNIT	PAPER NUMBER	
			2126	0	
			DATE MAILED: 08/01/2003	δ	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)			
	09/536,078	Travostino et al.			
Offic Action Summary	Examiner	Art Unit			
	Coorgo I Onio	2126			
	George L. Opie	2126			
Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address Peri df rR ply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE $\underline{\textbf{3}}$ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
 Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days be considered timely. If NO period for reply is specified above, the maximum statutory communication. Failure to reply within the set or extended period for reply will, by Status 	cation. s, a reply within the statutory minimu period will apply and will expire SIX	m of thirty (30) days will (6) MONTHS from the mailing date of this			
Responsive to communication(s) filed on	·				
2a) This action is FINAL . 2b) <u>X</u> Thi	s action is non-final.				
 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
4) X Claim(s) 1-33 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	n from consideration.				
5) Claim(s) is/are allowed.					
6) X Claim(s) 1-33 is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examine	er.				
10) The drawing(s) filed on is/are objecte	d to by the Examiner.				
11) The proposed drawing correction filed on is: a) approved b) disapproved.					
12) The oath or declaration is objected to by the Ex	kaminer.				
Pri rity under 35 U.S.C. § 119					
13)_ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).					
a) All b) Some * c) None of the CER' 1. received.	TIFIED copies of the priority of	documents have been:			
2 received in Application No. (Series Code	e / Serial Number)				
received in this National Stage application	on from the International Bure	au (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list	of the certified copies not rec	eived.			
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).					
Attachment(s)					
14) X Notice of References Cited (PTO-892)17) Interview Summary (PTO-413) Paper No(s)15) Notice of Draftsperson's Patent Drawing Review (PTO-948)18) Notice of Informal Patent Application (PTO-152)16) X Information Disclosure Statement(s) (PTO-1449) Paper No(s) and 6.19) Other:					

Art Unit: 2126

DETAILED ACTION

- 1. Request for copy of Applicant's response on floppy disk: Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic file copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk. Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory, however, it will help expedite the processing of your application. Your cooperation is appreciated.
- The U.S. Patents used in the art rejections below have been provided as 2. text documents which correspond to the U.S. Patents. The relevant portions of the text documents are cited according to page and line numbers in the art rejections below. For the convenience of Applicant, the cited sections are highlighted in the text documents. Consistent with Office procedure, the U.S. Patents corresponding to the text documents are also included with this action.
- 3. Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
 - 4. Claims 1-33 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dobbins et al. (U.S. Patent 5,509,123).

As to claim 1, Dobbins teaches "autonomous router objects", p2 49 - p3 6 that have "functions provided by a base resource object class which define the methods and data for configuration and control"

a "forwarding engine object is provided at each network interface", p3 10-27 and

Art Unit: 2126

"each forwarding engine is to provide the reception, processing, and forwarding of network layer packets" for handling the necessary function calls to direct the administration of the data transmissions, p8 et seq.

As to claim 2, Dobbins teaches the "tree" structure, p19 21-33 for managing the objects.

As to claims 3-4, Dobbins (pp9-10) teaches the memory management for storing and maintaining object data.

As to claims 5-7, Dobbins (p18 43-52) teaches the read/write limitations for controlling the object access.

As to claim 8, Dobbins (p3 10-27) teaches the objects execute on a network router device.

As to claim 9, see the discussion of claim 1 supra, with the additional hierarchical tree of objects taught by Dobbins p19 21-33 that controls execution of the forwarding plane.

As to claims 10-11, Dobbins (pp5-6) teaches the object-oriented programming principles that include, inter alia, the instantiation of an object from a class structure as recited.

As to claims 12-17, note the rejections of claims 2-8 above.

As to claim 18, note the rejection of claim 9 above. Claim 18 is the same as claim 9, except claim 18 is a computer program product claim and claim 9 is an apparatus claim.

As to claims 19-20, see the rejections of claims 10-11 respectively.

As to claim 21, see the claim 1 discussion supra. The limitations in claim 21 are the same as claim 1, but for the recitation of a processor, which would be inherent in the Dobbins system as discussed supra.

As to claims 22-28, note the rejections of claims 2-8 above.

As to claim 29, see the claim 1 discussion supra. The limitations in claim 29 are functionally equivalent to the claim 1 limitations, with the addition of a "managed object class", p2 49 – p3 6 that receives management data for managing the forwarding plane.

Art Unit: 2126

As to claim 30, see the claim 2 discussion supra.

As to claim 31, Dobbins (pp5-6) teache the object-oriented operations.

As to claim 32, Dobbins teaches the control data received from the control plane that is part of the network device, p6 17-52.

As to claim 33, note the rejection of claim 8 above.

- 5. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Each reference disclosed below is relevant to one or more of the Applicant's claimed invention.
- U.S. Patent No. 6,442,612 to Hugosson et al. which teaches the network agent for controlling packet processing;
- U.S. Patent No. 6,324,583 to Stevens which teaches the I/O component to facilitate network object communication;
- U.S. Patent No. 6,148,349 to Chow et al. which teaches the I/O mapping for interconnecting object protocols;
- U.S. Patent No. 5,983,274 to Hyder et al. which teaches the management of packetized network data for object communication/direction.

Contact Information:

PTO	Policy for Facsimile Submissions: AFTER-FINAL faxes must be signed and sent to (703) 746-7238. OFFICIAL faxes must be signed and sent to (703) 746-7239. NON OFFICIAL faxes should be sent to (703) 746-7240.
	All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

All responses sent by U.S. Mail should be mailed to:

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Application Control /536,078 Page 5

Art Unit: 2126

Hand-delivered responses should be brought to Crystal Park Two, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist). All hand-delivered responses will be handled and entered by the docketing personnel. Please do not hand deliver responses directly to the Examiner. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-9600. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (703) 308-9120 or via e-mail at George. Opie@uspto.gov. Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.

> ZARNI MAUNG PRIMARY EXAMINER